

(No Model.)

W. F. LUTZ, Jr.
DOOR ALARM.

No. 434,876.

Patented Aug. 19, 1890.

Fig. 1.

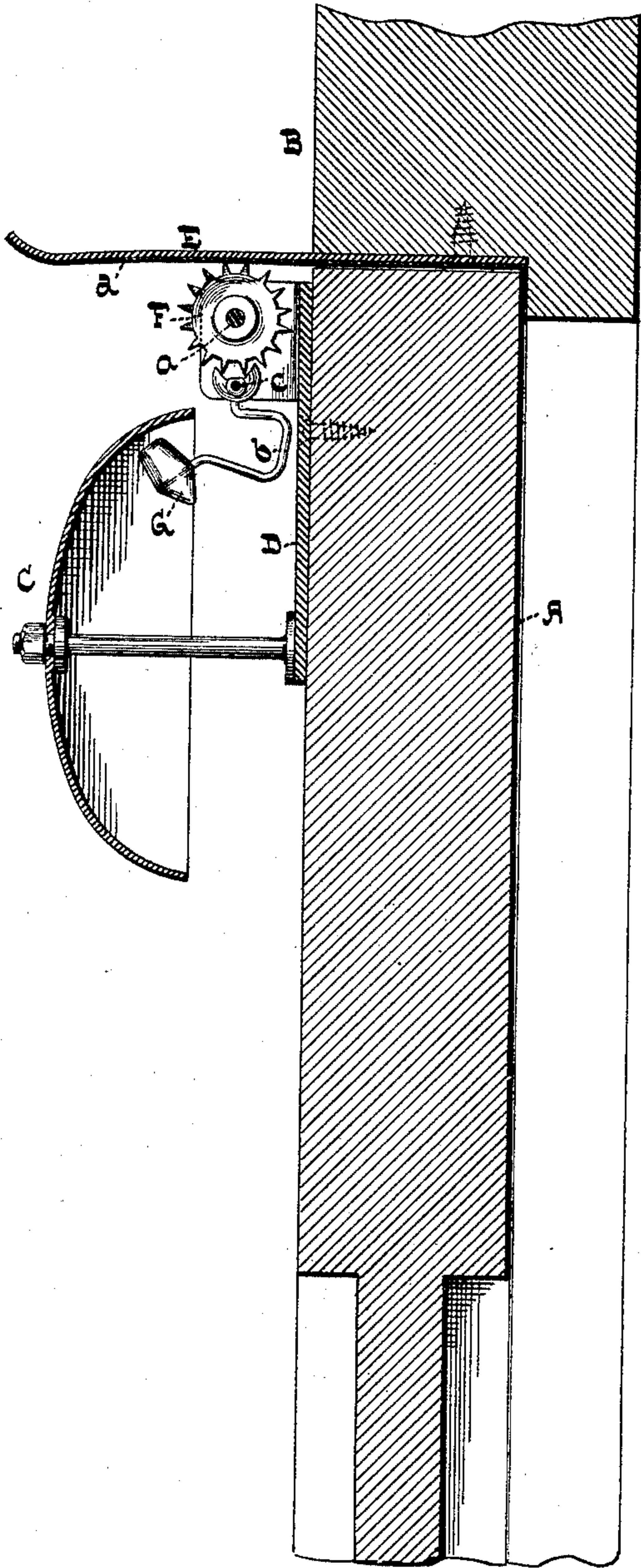
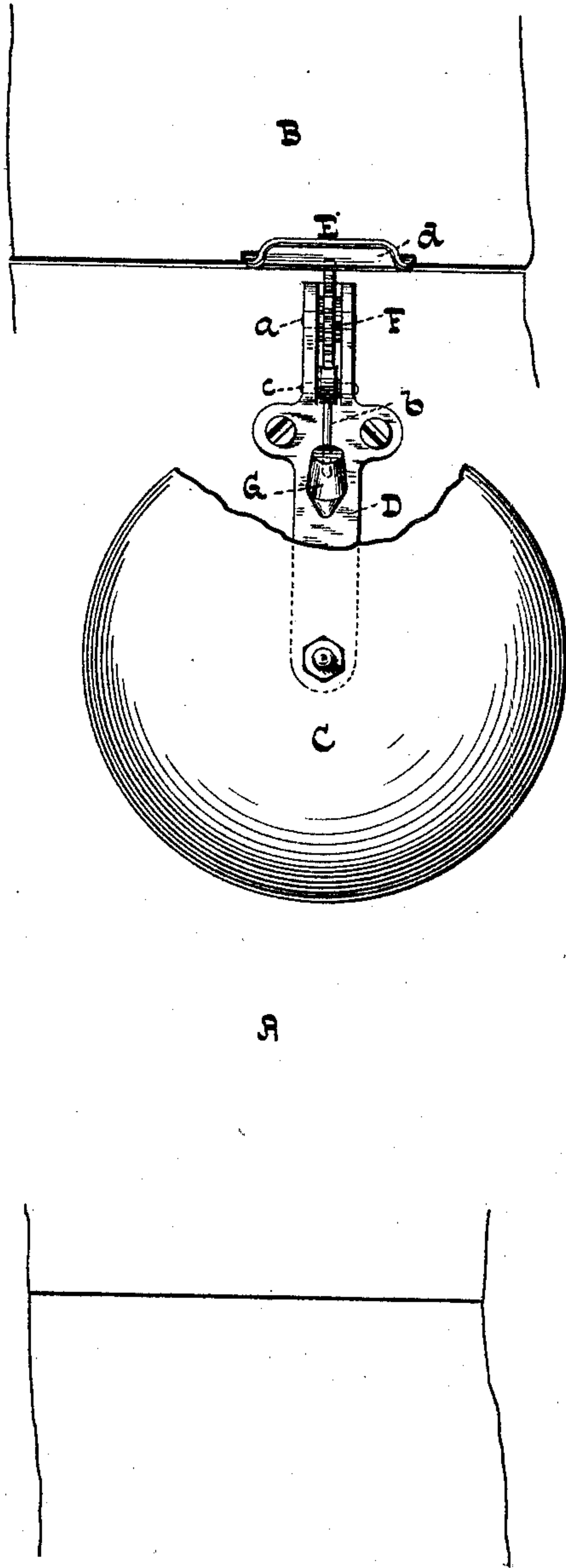


Fig. 2.



WITNESSES:

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UNITED STATES PATENT OFFICE.

WILLIAM F. LUTZ, JR., OF BROOKLYN, NEW YORK.

DOOR-ALARM.

SPECIFICATION forming part of Letters Patent No. 434,876, dated August 19, 1890.

Application filed September 28, 1889. Serial No. 325,376. (No model.)

To all whom it may concern:

Be it known that I, WILLIAM F. LUTZ, Jr., a citizen of the United States, and a resident of Brooklyn, in the county of Kings and State of New York, have invented certain new and useful Improvements in Door-Alarms, of which the following is a specification.

My invention has reference to improvements in door-alarms; and it consists in certain novel and peculiar features of construction, as fully pointed out in the following specification and claims, and illustrated in the accompanying drawings, in which—

Figure 1 represents a vertical section of a door provided with my improved alarm. Fig. 2 is an elevation of the same.

Similar letters indicate corresponding parts.

In the drawings, the letter A designates a door, hinged as usual, and B is the transom. C is the gong or bell, which is secured to a suitable base-plate D, attached to the door.

To the transom B is secured a horizontal plate E, which is arranged to be engaged by a toothed wheel F, mounted upon a spindle *a*, having bearings in suitable brackets on the base-plate. This toothed wheel F, which I shall hereinafter term the "actuating-wheel," engages with and vibrates the lever-arm *b* of the hammer G, said arm *b* being pivoted at *c* to the base-plate. When the door is swung open, the actuating-wheel F is rotated by frictional contact with the plate E, thereby repeatedly sounding the bell, until said wheel is drawn beyond the reach of the plate. In closing the door the bell is similarly sounded.

In practice I make the plate E of resilient metal and cover its lower surface with canvas,

leather, or other material to obtain a good frictional surface *d*.

It is evident that the actuating-wheel could be in the form of a gear and arranged to engage with a rack on the transom and that either device could be applied to a sliding door or to a window.

If desired, the bell could be applied to the transom or other part of the door-frame and the plate E secured to the door.

What I claim as new, and desire to secure by Letters Patent, is—

1. An alarm consisting of a plate secured to the transom or other stationary part and projecting at right angles therefrom, a gong secured to the door or moving part, a hammer arranged to strike the gong, and an actuating-wheel in operative connection with the plate and with the hammer for repeatedly vibrating the latter, substantially as described.

2. An alarm consisting of a plate secured to the transom or other stationary part, a gong secured to the door or moving part, a pivoted hammer arranged to strike the gong, and a toothed actuating-wheel arranged to bring its teeth into contact with the plate and to engage directly with the hammer to repeatedly vibrate the same, substantially as described.

In testimony that I claim the foregoing as my invention I have signed my name, in presence of two witnesses, this 11th day of September, 1889.

WILLIAM F. LUTZ, JR.

Witnesses:

ALFRED C. COOPER,
JOHN STORK.